

**Work Order ID 55256**

Page 1

January 12, 2010 1:22:04 PM

Item ID: D3759-1

Accept



Setup Start



Revision ID:

Item Name: Bushing

Stop



Start Date: 1/12/10 Start Qty: 3.00



Cust Item ID:

Required Date: 1/25/10 Req'd Qty: 3.00



Customer:

Reference:

Approvals: Process Plan:

PL

Date: 10-1-12

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run HoursDraw  
NumberDraw  
Rev.Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

Draw Nbr

Revision Nbr

D3759

Rev A

0.00

MATERIAL CERTIFICATION  
REQ'D UPON DELIVERY

100



Hardinge CNC LATHE SMALL

Hardinge

Memo

0.00

Hardinge CNC Lathe Small

Hardinge CNC LATHE SMALL Turn per Folio FA727 and Dwg D3759

Deburr

SD 10/01/18

110



QC2- Inspect parts off machine FAI/FAIB

0.00

QC

Quality Control

Memo

0.00

SD 10/01/18

120



QC8- Inspect parts - second check

0.00

QC

Quality Control

Memo

0.00

=&gt; SD 10/01/18

(X3) A

PRELIMINARY ISSUE

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

**Work Order ID 55256**

Page 2

January 12, 2010 1:22:04 PM

Item ID: D3759-1

Accept



Setup Start



Revision ID:

Item Name: Bushing

Stop



Start Date: 1/12/10 Start Qty: 3.00



Cust Item ID:

Required Date: 1/25/10 Req'd Qty: 3.00



Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/  
Work Center ID

130



Packaging

Packaging

Operation  
DescriptionIdentify as per dwg & Stock Location: BasketSet Up/  
Run Hours

0.00

Draw  
Number

Rev.

Plan  
Code

Qty

Accept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

140



QC

Quality Control

QC21- Final Inspection - Work Order Release

0.00

Memo

0.00

11. Prototype  
basket test.  
10.01.20

POSITIVE RECALL

EFFECTIVE \_\_\_\_\_ AUTH \_\_\_\_\_

RELEASED \_\_\_\_\_ DATE \_\_\_\_\_

MK  
10-1-27

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

# Picklist Print

Page 1

January 12, 2010 1:22:10 PM

Work Order ID: 55256



Parent Item: D3759-1



Parent Item Name: Bushing

Start Date: 1/12/10

Required Date: 1/25/10

Comments: IPP Rev:A 08-03-04 new issue DD verified by: LL

Start Qty: 3.00

Required Qty: 3.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
M304R0.375  304 ROUND BAR 0.375		Purchased		No		110	f	60.0851	0.1974			

<u>Warehouse</u> <u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
Main Warehouse		
MAT	60.0850579	
112058	0.01317895	
112473	11.6003	
113325	48.4715789	

22 10/01/18

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD	Work Order:	55256
Description: Bushings	Part Number:	3755-1
Inspection Dwg: 3257 Rev: A		Page 1 of 1

## FIRST ARTICLE INSPECTION CHECKLIST

## X First Article      Prototype

Measured by: <u>SA</u>	Audited by: <u>S</u>	Prototype Approval: N/A
Date: <u>10/10/18</u>	Date: <u>10/10/18</u>	Date: N/A

Rev	Date	Change	Revised by	Approved
A		New Issue	KJ/JLM	

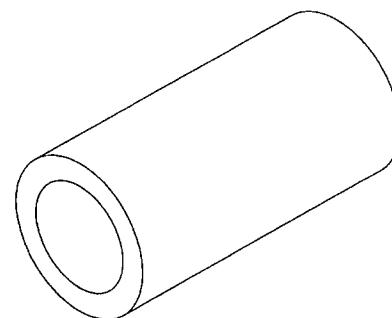
8 7 6 5 4 3 2 1

D D

C C

B B

A A



**D3759-1 BUSHING**

SHOP COPY

RETURN TO

ENGINEERING

UNCONTROLLED COPY

SUBJECT TO AMENDMENT

WITHOUT NOTICE

WORK ORDER

NO. 55254

*BD 10-1-13*

*RELEASER*  
*10-03-11 MPA*

NOTES:

- 1) MATERIAL: AISI 304/316, STAINLESS STEEL ROD  
(REF. DART SPEC M304R)  
OR AISI 304/316, STAINLESS STEEL TUBE  
(REF. DART SPEC M304TR)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.01 lbs

A	NEW ISSUE		AJS	08.03.03
REV.	DESCRIPTION		BY	DATE
DESIGN	AJS	DART AEROSPACE LTD		
DRAWN	<i>AJS</i>	HAWKESBURY, ONTARIO, CANADA		
CHECKED	<i>ME</i>	DRAWING NO.	REV. A	
MFG. APPR.	<i>M</i>	D3759	SHEET 1 OF 2	
APPROVED	<i>TD</i>	TITLE	SCALE	
DE APPR.	<i>T</i>	BUSHING	NTS	
DATE	08.03.03		COPYRIGHT © 2000 BY DART AEROSPACE LTD	
	THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS REPRODUCED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD			

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

8

7

6

5

4

3

2

1

D

C

B

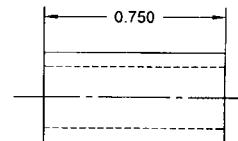
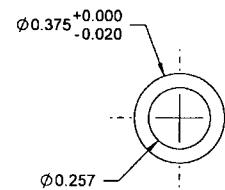
A

D

C

B

A



D3759-1 BUSHING

108.03.11/01

W/O 55256

DESIGN	AJS	DART AEROSPACE LTD			
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA			
CHECKED	JK	DRAWING NO.			
MFG. APPR.	JK	REV. A			
APPROVED	JK	D3759			
DE APPR.	JK	SHEET 2 OF 2			
DATE	08.03.03	TITLE	SCALE		
		BUSHING			
NTS					
COPYRIGHT © 2003 BY DART AEROSPACE LTD					
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS					
NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT					
WRITTEN PERMISSION FROM DART AEROSPACE LTD					

8

7

6

5

4

3

2

1

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

## Receiving Report

Date: 9/12/2  
Supplier: MS6WNR

Batch No: M113325  
Dart P/O: 10863

Packing Slip: Yes  No   
Invoice: Yes  No   
Receipt: Cash  Cr

Release Note Attached: Yes  No  N/A   
Waybill Attached: Yes  No  N/A   
Shipment Complete: Yes  No  N/A   
QC6 Inspection  N/A   
Work Order  N/A

### Discrepancies

Part Number	Description	Quantity Ordered	Quantity Received	Quantity Returned	Quantity Short	Comments
M6061TG32500V03 SW		20	0	0	20	
M3-320750		84	0	0	84	

Initials of receiver (if shipment OK) Level 12

Production/Admin: 9/12/2  
Date 9/12/2  
Received/Costing Initial JL

### Location

## Purchase Order Receipt Listing

Page 1 of 1

December 02, 2009 1:06:13 PM

All amounts are calculated in domestic currency.

All Vendors PO ID PO10863 Receipt Dates from 12/2/2009 to 12/2/2009 All Line Item Types

All Item ID/GL/WOs All Rec. Employees All Currencies

Grouped by Vendor ID

Purchase Order ID/ Curr Type	Line Nbr/ Insp Req	Project ID	Reference/ Description/ Cert Std	PO U/M / Stock U/M	Required Date Required Qty	Recv Date/ Recv Emp	Recv Qty (PO U/M)	Cost Per Unit/ Recv Value	Inspected Qty/ Rejected Qty (PO U/M)	MRB Qty/ MRB Reject Qty	Book Amt
VendorID\Vendor Name	VC-MAG002	Magna Stainless									
PO10863	1		M6061T6B0.375X01. f 000		12/3/2009	12/2/2009	20.0000	\$1.00	0.0000	0	\$20.00
CAD	No		6061T6 BAR .375 x f 1.00 113325		20.0000	Stores		\$20.00	0.0000	0	
	3		M303R1.000 f 303 Round Bar 1.00 f 113325		12/3/2009	12/2/2009	62.0000	\$8.17	0.0000	0	\$506.34
	No				60.0000	Stores		\$506.34	0.0000	0	
	5		M304R0.375 f 304 ROUND BAR f 0.375 113325		12/3/2009	12/2/2009	60.0000	\$1.00	0.0000	0	\$60.00
	No				60.0000	Stores		\$60.00	0.0000	0	
											<b>Total Received Quantity:</b> 142.0000
											<b>Total Qty to Inspect (PO U/M):</b> 0.0000
											<b>Total Reject Quantity:</b> 0.0000
											<b>Total Receipt Value:</b> \$586.34
											<b>Total Balance Due Quantity:</b> 0.0000



Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, ON K6A 1K7  
Tel: 613 632 9577  
Fax: 613 632 1053

\*\*\*PO REPRINT\*\*\*

Purchase Order ID PO10863

Purchase Order Date 12/01/09

PO Print Date 12/01/09

Page Number 1 of 2

Order From :

MAGNA STAINLESS  
5775 RUE KIERAN  
ST LAURENT, QC H4S 0A3  
CA

VC-MAG002

**FAXED**  
*Oct/10/09*

Contact Name	Buyer	Chantal Lavoie
Vendor Phone	Requisition Nbr	
Vendor Fax	Tax Resale Nbr	10127-2607
Vendor Account Nbr	Terms	Net 30
	Currency	CAD
	FOB	

Ship To : DART AEROSPACE LTD 1270 ABERDEEN  
HAWKESBURY, ON K6A 1K7  
CANADA

Line Nbr	Reference Revision ID Vendor Part Number	Description/ Mfg ID	Req Date/ Taxable	Req. Qty/ Unit of Measure	Ship Method	Unit Price	Extended Price
1	M6061T6B0.375X01.000	6061T6 BAR .375 x 1.00	12/03/09 Yes	✓ 20.00 f	Yours ppd	\$1.0000	\$20.00
		<b>Special Inst:</b>	MAT: 6061-T6/T651/T6510/6511/T62 ALUMINUM BAR SPEC: QQ-A-225/8 OR AMS-QQ-A- 225/8(OR AMS 4117/4128/4115/4116) OR QQ-A-200/8 OR AMS-QQ-A- 200/8(OR AMS 4160) OR ASTM B211 OR ASTM B221				
2	M6061T6B2.500X03.500	6061-T6 Bar 2.50 x 3.50	12/10/09 Yes	20.00 f	Yours ppd	\$44.5000	\$890.00
		<b>Special Inst:</b>	SAME AS ABOVE				
3	M303R1.000	303 Round Bar 1.00	12/03/09 Yes	60.00 f	Yours ppd <i>62 nec</i>	\$8.1667	\$490.00
		<b>Special Inst:</b>	PURCH: AISI 303 ROUND BAR (NOTE: AISI 304/316 NOT ACCEPTABLE)				

12/01/09

*12/01/09/2*



Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, ON K6A 1K7  
Tel: 613 632 9577  
Fax: 613 632 1053

\*\*\*PO REPRINT\*\*\*

Purchase Order ID PO10863

Purchase Order Date 12/01/09  
PO Print Date 12/01/09

Page Number 2 of 2

Order From : VC-MAG002

MAGNA STAINLESS  
5775 RUE KIERAN  
ST LAURENT, QC H4S 0A3  
CA

Contact Name	Buyer	Chantal Lavoie
Vendor Phone	Requisition Nbr	
Vendor Fax	Tax Resale Nbr	10127-2607
Vendor Account Nbr	Terms	Net 30
	Currency	CAD
	FOB	

4	M303R0.750	303 Round Bar 0.750	12/03/09 Yes	84.00 f	Yours ppd	\$4.6667	\$392.00
			Special Inst:	SAME AS ABOVE			
5	M304R0.375	304 ROUND BAR 0.375	12/03/09 Yes	✓ 60.00 f	Yours ppd	\$1.0000	\$60.00
			Special Inst:	PURCH MAT: AISI 304/316 SS ROUND BAR(NOTE: AISI 303 NOT ACCEPTABLE) SPECIFICATION: ASTM A276			
						PO Total:	\$1,852.00

MATERIAL CERTIFICATION  
REQ'D UPON DELIVERY

CD  
No substitution or deviation without  
consent.  
Certificate of Conformity or Material  
Certification required when applicable

Change Nbr: 3

Change Date: 12/01/09

**Chantal Lavoie**

*10863*

**From:** Eryck Blais [eblais@magnastainless.com]  
**Sent:** December 1, 2009 10:02 AM  
**To:** 'Chantal Lavoie'  
**Subject:** RE: quote

THANK YOU  
ERYCK

---

**From:** Chantal Lavoie [mailto:[clavoie@dartaero.com](mailto:clavoie@dartaero.com)]  
**Sent:** Tuesday, December 01, 2009 9:50 AM  
**To:** Eryck Blais  
**Subject:** quote

Please advise price & delivery on material.  
303 round bar 1" x 60 ft 5 PCS X 98.00 EA STK

303 round bar .750" x 80 ft 7 PCS X 56.00 EA TOR

304 round bar .375" x 60 ft 5 PCS X 12.00 EA STK  
Thanks  
Chantal

**Chantal Lavoie**

---

**From:** Eryck Blais [eblais@magnastainless.com]  
**Sent:** November 30, 2009 2:08 PM  
**To:** 'Chantal Lavoie'  
**Subject:** RE: quote

THANK YOU  
ERYCK

---

**From:** Chantal Lavoie [mailto:clavoie@dart Aero.com]  
**Sent:** Monday, November 30, 2009 8:21 AM  
**To:** Eryck Blais  
**Subject:** quote

Please advise price & delivery on material.  
6061t6 bar 1" x .375" x 20 ft 1 PC 20.00 EA STK  
6061t6 bar 2-1/2" x 3-1/2 x 20 ft 2 PC 445.00 EA 5-7 DAYS  
Thanks  
Chantal

SOLD TO:  
 DART AEROSPACE LTD  
 1270 ABERDEEN STREET

HAWKESBURY , ON  
 K6A 1K7  
 Contact: CHANTAL

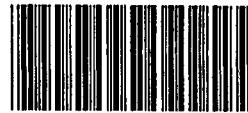
## PACKING LIST

Page 1 of 1

I020294

SHIP TO:  
 DART AEROSPACE LTD  
 1270 ABERDEEN STREET

HAWKESBURY , ON  
 K6A 1K7  
 Ship Terms: PREPAID



SPECIAL INSTRUCTIONS

MTR:Y

Currency	Sales Person	Customer Phone	Customer Fax	Customer PO	
CANADIAN DOLLARS	ERYCK BLAIS	(613) 632-5200	(613) 632-1058	P010863	
Sales Order	Terms	Ship Via	Date Ordered	Date Required	Date Shipped
W022309	NET 30 DAYS	NIR:R-557065-1	12/01/09	12/02/09	12/02/09

Ordered	Back Ordered	Unit	Description	Bundle #	Heat #	Shipped
1		PC	ALUMINUM FLATS AFL 6061 T6 3/8" x 1" x R/L 20' 9 LB / 1 PC	L030346	46448	1
5		PC	STAINLESS ROUNDS SRB 303 1" x R/L 12' 4" 166 LB / 5 PC	L026603	79607	5
5		PC	SRB 304 3/8" x R/L 12' 24 LB / 5 PC	L033304	18097	5

*CS/1/2*

Bundles: 1

Approx Weight: 199 LB

Received by:

Date: \_\_\_\_\_

Signature: \_\_\_\_\_

**VIRAJ PROFILES LIMITED**

10 IMPERIAL CHAMBERS, FIRST FLOOR,  
WILSON ROAD BALLARD ESTATE,  
MUMBAI 400 038 INDIA

**CUSTOMER:**

MAGNA STAINLESS INC (DIV OF CANADIAN  
SPECIALTY METALS INC.)  
5775 RUE KIERAN ST. LAURENT  
QUEBEC H4S 0A3

**INSPECTION CERTIFICATE**

ORDER NO.  
P003627

PACKING LIST NO. IMP/101844  
INSPECTION NO. IMP/101844/1

DATE  
01/04/2009

BUNDLE NO.  
2046701, 2046826

GRADE  
T-303

**DESCRIPTION:**

STAINLESS STEEL BRIGHT BARS L/C NO.: 1700402-DT, 13/04/09

OK of 41.12.02

**COLD DRAWN GROUND & POLISHED**

SIZE (IN)	SHAPE	TOLERANCE	LENGTH (FT)	PIECES	WEIGHT (LBS)
1	ROUND	ASTM A484	12 R/L	99	3292

**CHEMICAL ANALYSIS**

HEAT NO.	C	Mn	Si	S	P	Ni	Cr	Mo	Cu	N	Co
79607	0.054	1.89	0.48	0.300	0.038	8.05	17.12	0.30	0.50	0.056	0.13

**TEST RESULT**

2% YIELD STRENGTH KSI	TENSILE STRENGTH KSI	ELONGATION %	REDUCTION OF AREA %	HARDNESS BHN	GRAIN SIZE
63	99	41	60	199	6

**Specification:**

MATERIAL CONFIRMS TO ASTM A681-95B COND A/ASTM A582-05 COND A/AMS 5640R TYPE 1, EXCEPT MARKING, QQS-764B COND A, EXCEPT MARKING, UNS S-30300, CERTIFIED AS PER EN-10204 3.1

**Remarks:**

MATERIAL IS FREE FROM MERCURY CONTAMINATION, FREE FROM WELD OR MELT SOURCE/AOD, MACRO: GOOD, MICRO: GOOD, MINIMUM SOLUTION ANNEALING TEMPERATURE 1050°C, SOAKING TIME 1hr/inch, WATER QUENCHED, COUNTRY OF ORIGIN INDIA/WE CONFIRM THAT THE MATERIAL HAS BEEN TESTED AND FOUND TO BE FREE FROM RADIOACTIVE CONTAMINATION.

We hereby certify that the material described above has been tested and complies with the terms of order/contract.

INDIAN	OVERSEAS 014/	WORKS INSPECTOR BANK
	1 6 3 9 4 2	
	FORT, MUMBAI-23.	

# sapa:

## ROCKWELL CERTIFICATION

<b>Customer</b>	<b>Date</b>	<b>Location</b>
MAGNA STAINLESS INC.	8/12/2009	Mississauga
<b>Customer #</b>	<b>Order #</b>	
61087	9071560	
<b>Control #</b>	<b>P.O. #</b>	
57366-1	PO06106	
<b>Cust Part #</b>	<b>Die #</b>	
1" X .375" Flat Bar	AS 7772	
<b>Alloy &amp; Temper</b>	<b>Cast #</b>	
G061 T6	46448	

### Test results

	Rc E
Min. Req.	88
Actual	92

8/12/2009

### Typical Chemistry

6061

Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti
0.4-0.8	0.7mx	0.15-0.4	0.15mx	0.8-1.20	0.04-0.35	0.05mx	0.25mx	0.15mx

Tensile testing is performed according to ASTM B557.84 requirements  
Mechanical test results conform to specifications for ~~ASTM B 221/SB221~~ ~~ASTM B 308/ B 308M~~  
except for Sec. 8.2 (Number of Specimens) which is determined by customer requirement

The aluminum extrusions tested meet the chemical composition requirements of the alloy specified.

Tested By: Anil Verma Date: 8/12/2009

Indalex Ltd.  
5675 Kennedy Rd.  
Mississauga, ON, L4Z 2H9

Tel: (905) - 890 - 8821  
Fax: (905) - 890 - 3670

# VIRAJ PROFILES LIMITED

VIRAJ<sup>®</sup>

Unit-V  
Survey NO 110,111,114/1 C-D 116,119 & 120  
Village: Mahagoan  
Dist: THANH 401 506  
MAHARASHTRA, INDIA.

## TEST CERTIFICATE

CUSTOMER	ORDER NO	SPACKING LIST NO	INSPECTION NO	DATE
	P-00942	IMP/902726/11	100000110086	21.07.2009

BUNDLE NO:  
5110655, 5110653, 5110654.

DESCRIPTION  
STAINLESS STEEL BRIGHT BARS

GRADE  
304/304L

HEAT NO  
18097

### SMOOTH TURNED

SIZE	SHAPE	TOLERANCE	LENGTH	PIECES	WEIGHT
3/8"	ROUND	ASTM A484	12'-14'	582	2,644. LB

### CHEMICAL ANALYSIS

%C	%Mn	%Si	%S	%P	%Cr	%Ni	%Cu	%Mo	%Co	%N2
0.0200	1.460	0.480	0.0240	0.0340	18.280	8.080	0.600	0.340	0.140	0.08900

### TEST RESULTS

0.2% yield strength ksi	Tensile Strength ksi	Elongation %	% Reduction Of Area %	Hardness BHN	Grain Size NOS
81.0	102.0	43.0	71.0	209.0	7.0

### SPECIFICATION:

MATERIAL CONFIRMS TO ASTM A182/A-182M-06, A276-06 COND A, A479/A479M-06a COND A, A193/A193M-06a B8 CL-1, A320/A320M-05a B8 CL-1, A484 06b, A388/A388M-05 ASME SA112-04, SA479-04, SA193-04 B8 CL-1, SA320-04 B8 CL-1, ASTM A314-2002, IOC SATISFACTORY AS PER ASTM A 262-02a PRACTICE B, AMS 5639Q, QQ-5-769F, NACE MR0175-2002, AISI 304/304L, UNS#S30400/S30403. CERTIFICATION AS PER EN 10204-3.1.

### REMARKS

MATERIAL IS FREE FROM MERCURY CONTAMINATION, FREE FROM WELD OR WELD REPAIRS, MICRO:PRBE FROM CONTINOUS CARBIDE NETWORK ON GRAIN BOUNDARIES. MACRO:GOOD, MINIMUM SOLUTION ANNEALING TEMPERATURE 1050C, SOAKING TIME 1/2 hr, WATER QUENCHED, MELT SOURCE:AOD. WE CONFIRM THAT THE MATERIAL HAS BEEN TESTED AND FOUND TO BE FREE FROM RADIOACTIVE CONTAMINATION. COUNTRY OF ORIGIN: INDIA.

We hereby certify that the material described above has been tested and complies with the terms of order/contract.

*S. Suvarna*  
WORKS INSPECTOR  
S. SUVARNA.

10007728-180947